

Application No. 10/561,120
Amdt. dated 3 August 2009
Reply to Office Action of 2 April 2009

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (previously presented) A transponder for the emission and reception of radio frequency signals comprising, a chip and a coil reel, a plastic film covering, said chip and said coil reel, said transponder thus covered, being housed between male and female portions of a capsule, said female portion comprising a compact base connected to an equally compact side forming a smooth end rim, the internal wall of said compact side has an edge with a configuration comprising a small straight path, distal from said compact base, followed by a "V" shape indentation followed by a retracted bottom housing which has its width limited by a ring wall, said ring wall extends up about the vertex of said "V" indentation, with said ring wall having a bevel on the side of the male portion and rounded edge on the other side; the bottom of said compact base is located at a level above the retracted bottom; the male portion comprises a compact top whose diameter is substantially compatible with the straight path of the female portion, with said top comprising an attachment portion, comprising a correspondence straight path followed by a "V"-shaped projection which is coupled and fits under relative pressure to the "V" shaped indentation of the female portion, while an equally ring-shaped rim is settled over the retracted bottom, so to be restrained by the ring wall; said male and female portions become fitted between them under considerable pressure; a chamber is created between the bottom of the compact base and the maximum height of the ring wall, coinciding with the bottom of the compact top, inside which the transponder is housed, with a diameter

Application No. 10/561,120
Amdt. dated 3 August 2009
Reply to Office Action of 2 April 2009

adjustment existing in said chamber very near to the internal diameter of the ring wall.

2. (previously presented) The device of claim 1, wherein said chamber has dimensions to allow the covered transponder to fit under pressure, forming smooth arching determining a "spring" effect having the purpose to avoid the transponder to absorb vibration, as well as the random balance of inside capsule and, in case of huge twisting or impact over the capsule, the transponder does not happen to deform.
3. (previously presented) The device of claim 1, which is employed in aggressive chemical or mechanical means, with no prejudice to the functions of the transponder, since it presents double protection; the first one from the cover by the plastic film or similar immersion or any other form allowing said resource and being able to quickly dry chemical and mechanical insulation; and the second one through the capsule made of transparent material to electromagnetic waves and appropriate to resist against various mechanical efforts, be them twisting, flexion, traction or even mechanical vibrations, being the employed material preferably a polycarbonate provided not only with transparency to electromagnetic waves, but also relative flexibility.
4. (previously presented) The device of claim 1, in which the covering, allows the transponder to respond, in a fully efficient way, to the use in naturally aggressive chemical means, including acids.
5. (currently amended) The device of claim 1, in which said capsule is formed of transparent material to electromagnetic waves and appropriate to resist against various mechanical efforts, such as those occurring inside a tire.

Application No. 10/561,120
Amdt. dated 3 August 2009
Reply to Office Action of 2 April 2009

6. (previously presented) The device of claim 5 in which the chamber has dimensions to allow the covered transponder to fit under pressure, forming smooth arching determining a "spring" effect having the purpose to avoid the transponder to absorb vibration, as well as the random balance inside the capsule and, in case of huge twisting or impact over the capsule, the transponder (T) does not happen to deform.

7. (currently amended) An electrical device for transmitting or receiving electric signals, comprising:

A transponderan electronic device;
a film, coating said transponderelectronic device;
a thin capsule, enclosing said film coated transponder within a chamberelectronic device, said capsule comprising:
 a base portion; and
 a top portion, said top portion securely interlocking with said base portion
to form the chamber, said chamber being of a size as to cause the transponder to form an arch within the chamber.

8. (cancel)

9. (cancel)

10.(currently amended) The device of claim 79 wherein said transponder comprises a chip and a coil reel.

Application No. 10/561,120
Amdt. dated 3 August 2009
Reply to Office Action of 2 April 2009

11.(currently amended) The device of claim 7, wherein said base portion further comprises:

a platform for said transponderelectronic device;
a ring wall around said platform; and
a side wall around anthe edge of said base portion; and
wherein said top portion further comprises:

a cover portion; and
an attachment wall, said attachment wall structured and arranged to fit snugly between said ring wall and said side wall of said base portion.

12.(currently amended) The device of claim 11, further comprising:

a groove on anthe interior side of said side wall; and
a protrusion on anthe exterior side of said attachment wall, said protrusion structured and arranged to mate with said groove in a manner that snugly secures said top portion to said base portion.

13.(previously presented) The device of claim 12, wherein said groove extends along a middle portion of said side wall.

14.(previously presented) The device of claim 11, wherein said attachment wall extends below said platform when said top portion and said base portion are secured to each other.

15.(currently amended) The device of claim 7, wherein said capsule is structured and arranged such that transponderelectronic device fits snugly in the chamber between said top portion and said base portion to prevent damage from vibration.

Application No. 10/561,120
Amdt. dated 3 August 2009
Reply to Office Action of 2 April 2009

16.(previously presented) The device of claim 7, wherein said film is formed or a substance which prevents said electronic device from being damaged by chemicals, including acids, while not interfering with said electronic device's functionality.

17.(previously presented) New device of claim 7, wherein said plastic film is plastic.

18.(previously presented) The device of claim 7, wherein said capsule is formed of a material that does not interfere with electromagnetic waves and is strong enough to resist forces associated with twisting, flexion, traction or even mechanical vibrations.

19.(previously presented) The device of claim 7, wherein said capsule is formed form a polycarbonate provided not only with transparency to electromagnetic waves, but also relative flexibility.